

An aerial photograph of the Alameda Naval Air Station and its surroundings. The station is a large, rectangular area with runways and taxiways, situated on a peninsula. To the right of the station is a large body of water, likely San Francisco Bay, with a bridge visible in the distance. To the left and below the station is a densely populated urban area with many houses and buildings. The sky is clear and blue.

# **Former Naval Air Station Alameda Environmental Program**

## **Status Update for the ARRA**

November 2, 2011

Peter Russell, PhD, PE  
Russell Resources, Inc.





## **OUTLINE of PRESENTATION**

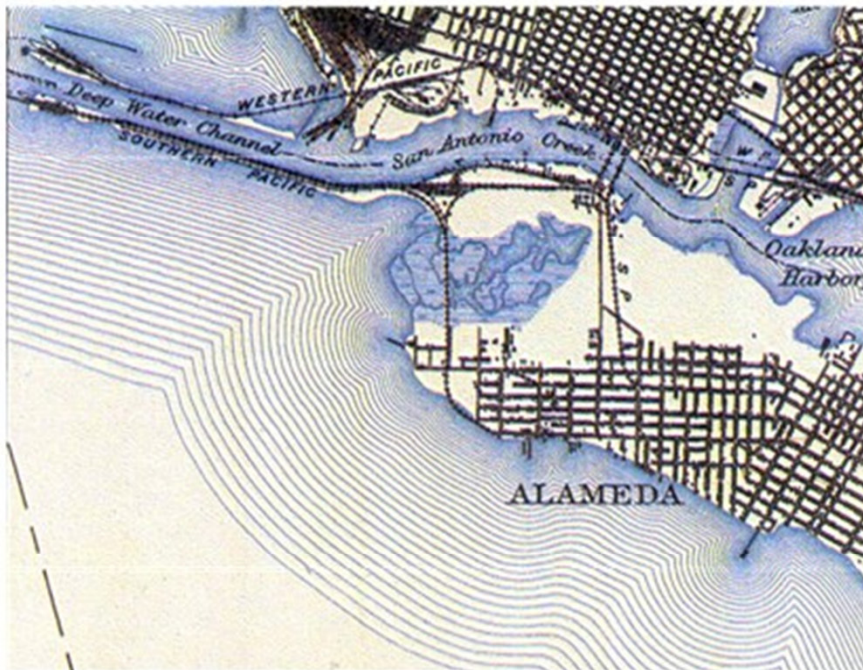
- Base Background & Historical Use
- Environmental Program
  - Regulatory Teams
  - Cleanup Approach
  - Navy Funding
- Status of Cleanup & Property Transfer
- Reuse Levels Achieved by Cleanup
- Special Topics
- Land-Use Covenant for Restricted Land
- Long-Term Stewardship



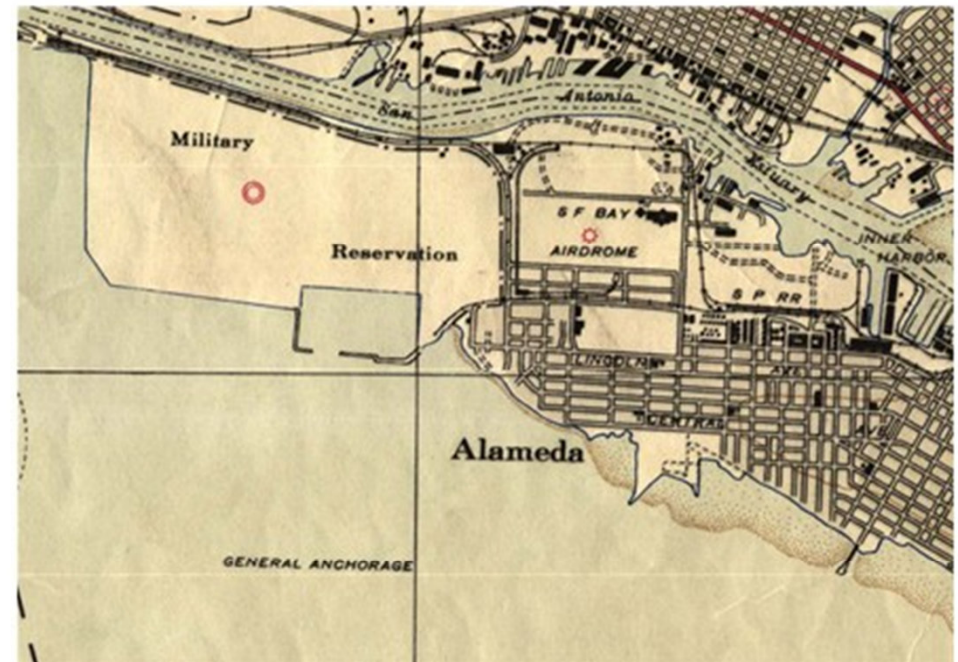
## BASE BACKGROUND & HISTORICAL USE

Creation of Alameda Point: Constructed with fill materials from dredging activities occurring between 1887 and 1975

1915



1942



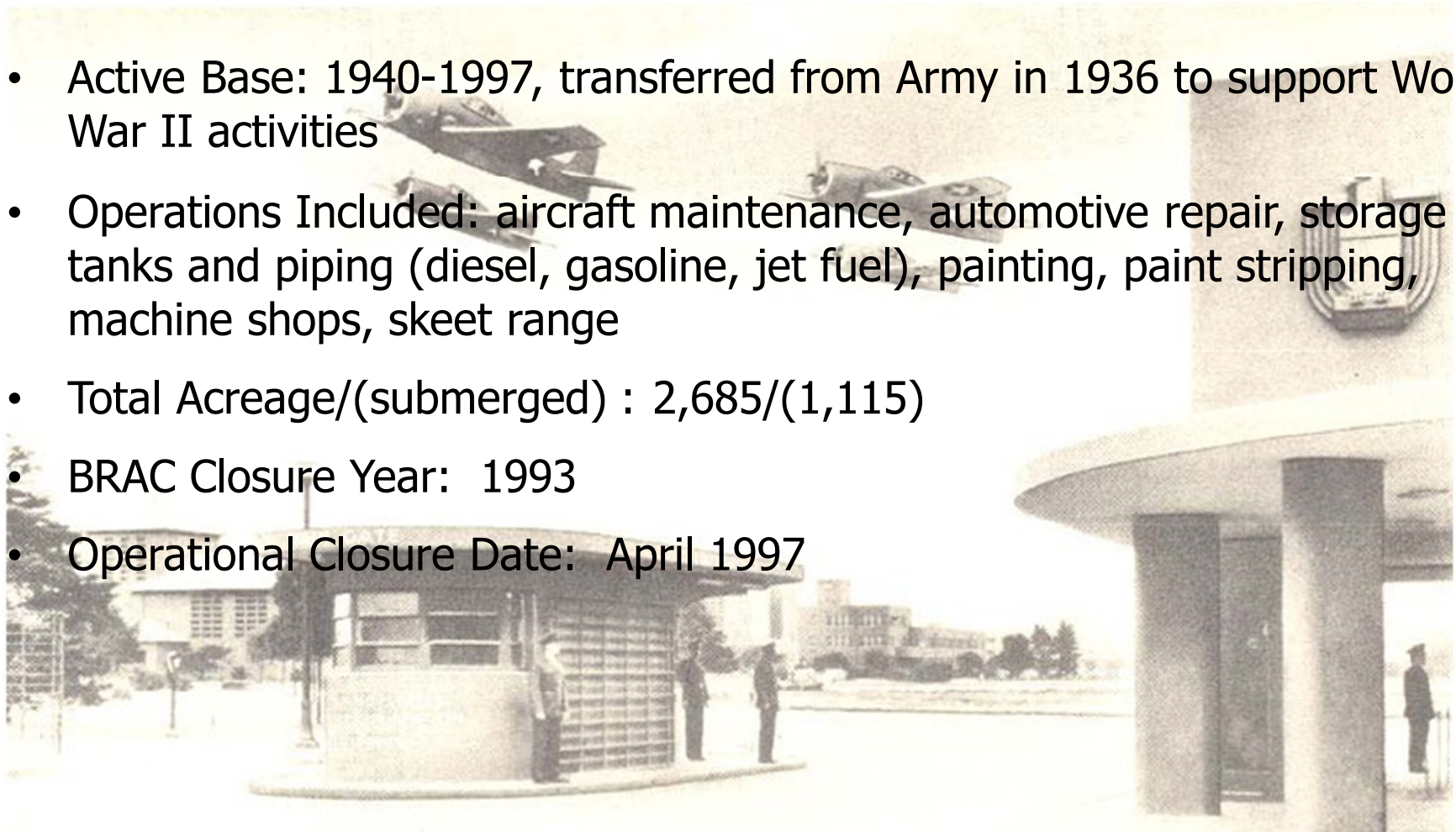




# BASE BACKGROUND & HISTORICAL USE

## Navy Operations

- Active Base: 1940-1997, transferred from Army in 1936 to support World War II activities
- Operations Included: aircraft maintenance, automotive repair, storage tanks and piping (diesel, gasoline, jet fuel), painting, paint stripping, machine shops, skeet range
- Total Acreage/(submerged) : 2,685/(1,115)
- BRAC Closure Year: 1993
- Operational Closure Date: April 1997





# BASE BACKGROUND & HISTORICAL USE

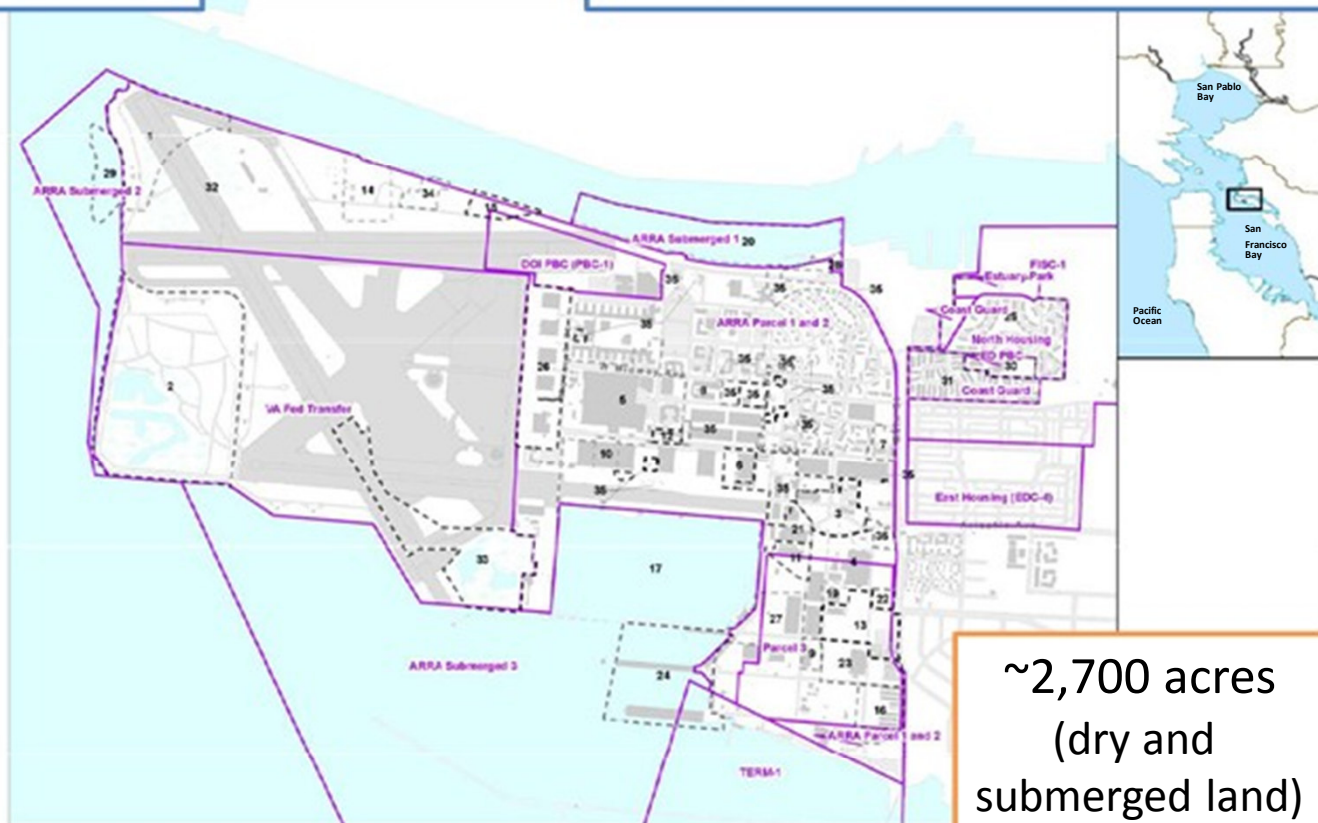
## Alameda Point – Relative Size

Lake Merritt, Oakland, CA



~155 acres

Alameda Point, Alameda, CA



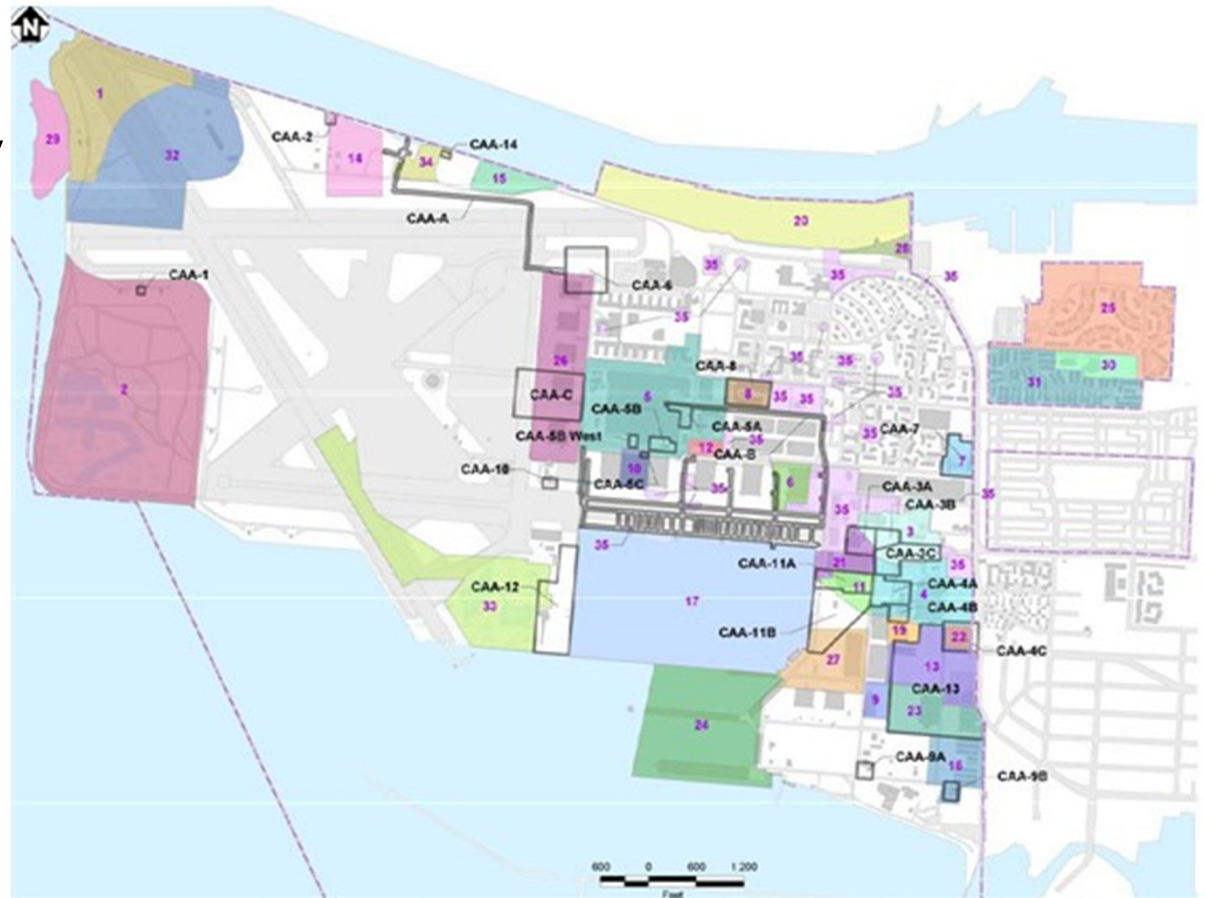
~2,700 acres  
(dry and  
submerged land)



# ENVIRONMENTAL PROGRAM

Contaminated soil and groundwater are addressed under two programs:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Program (Federal)
- The Petroleum Program (California)







# ENVIRONMENTAL PROGRAM

## CERCLA Program: 34 Installation Restoration (IR) Sites

The formal CERCLA Process considers stakeholder input on IR Site documents and decisions

- BRAC Cleanup Team (BCT):
  - Navy
  - EPA
  - DTSC
  - Water Board
  - ARRA (as observer)
- Restoration Advisory Board (RAB):
  - Community Members
  - BCT Representatives





# ENVIRONMENTAL PROGRAM

## Petroleum Program: 23 Corrective Action Areas (CAAs)

- Includes 250+ Environmental Units (USTs, ASTs, piping, sumps, etc.)
- Water Board is the Lead Regulatory Agency







# REGULATORY TEAMS

## EPA & California Regulatory Teams

- Team Leader
- Technical Support
  - Ecologists
  - Engineers
  - Hydrogeologists
  - Toxicologists
- Other Support
  - Management
  - Legal Counsel
  - Public Participation Specialists
  - Contractors
- DTSC Is Lead for: CDPH (rad), CDF&G (wildlife), and Water Board (petroleum)



## CLEANUP APPROACH

- Alameda Point uses innovative technologies for cleanup
- Cleanups are short duration, from 1-5 years
- Cleanups are evaluated for carbon footprint
- The majority of the base is being cleaned to residential standards



Six-Phase Heating







## NAVY ENVIRONMENTAL FUNDING

Navy's commitment to environmental cleanup at Alameda...

NAS Alameda Yearly Funding:

FY2006: \$50M

FY2009: \$48M

FY2012: \$39M (proj.)

FY2007: \$41M

FY2010: \$38M

FY2013+: \$91M (est.)

FY2008: \$63M

FY2011: \$28M

The NAS Alameda clean-up program brings money and jobs to the Bay Area and Alameda.

- Approximately 50 full-time-equivalent jobs are directly supported by the Navy's Alameda Point clean-up program!
- Additional economic benefits include purchase of materials, equipment rental, sub-contracted support, and local business consumption



## **STATUS of CLEANUP & PROPERTY TRANSFER**

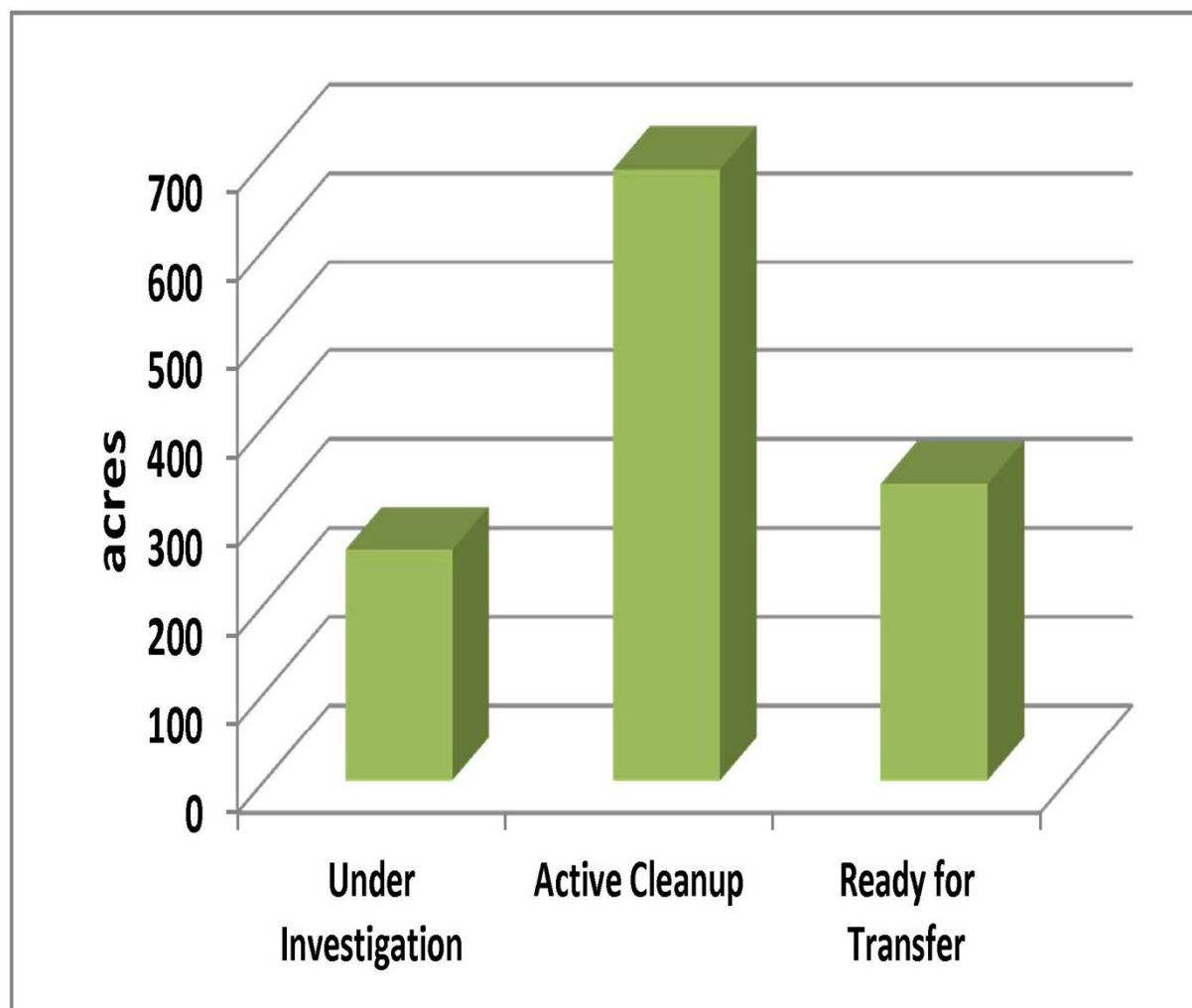
- Environmental Program Goal: Complete the environmental program in support of land transfer
- Initially, Environmental Program focused on identifying lands suitable for leasing
  - 1,000 +/- acres leased to the ARRA
  - Cleanup coordinated with tenants whenever feasible
- Alameda Point: 2,685 total acres, with 309 +/- acres transferred prior to 2011
  - Reversionary Parcel to City of Alameda (Term-1)
  - East Housing Parcel (Bayport Housing)
  - Coast Guard Housing Area
  - DoI Public Benefit Conveyance Parcel (future Sports Complex)





## STATUS of CLEANUP

### Alameda Point CERCLA Sites



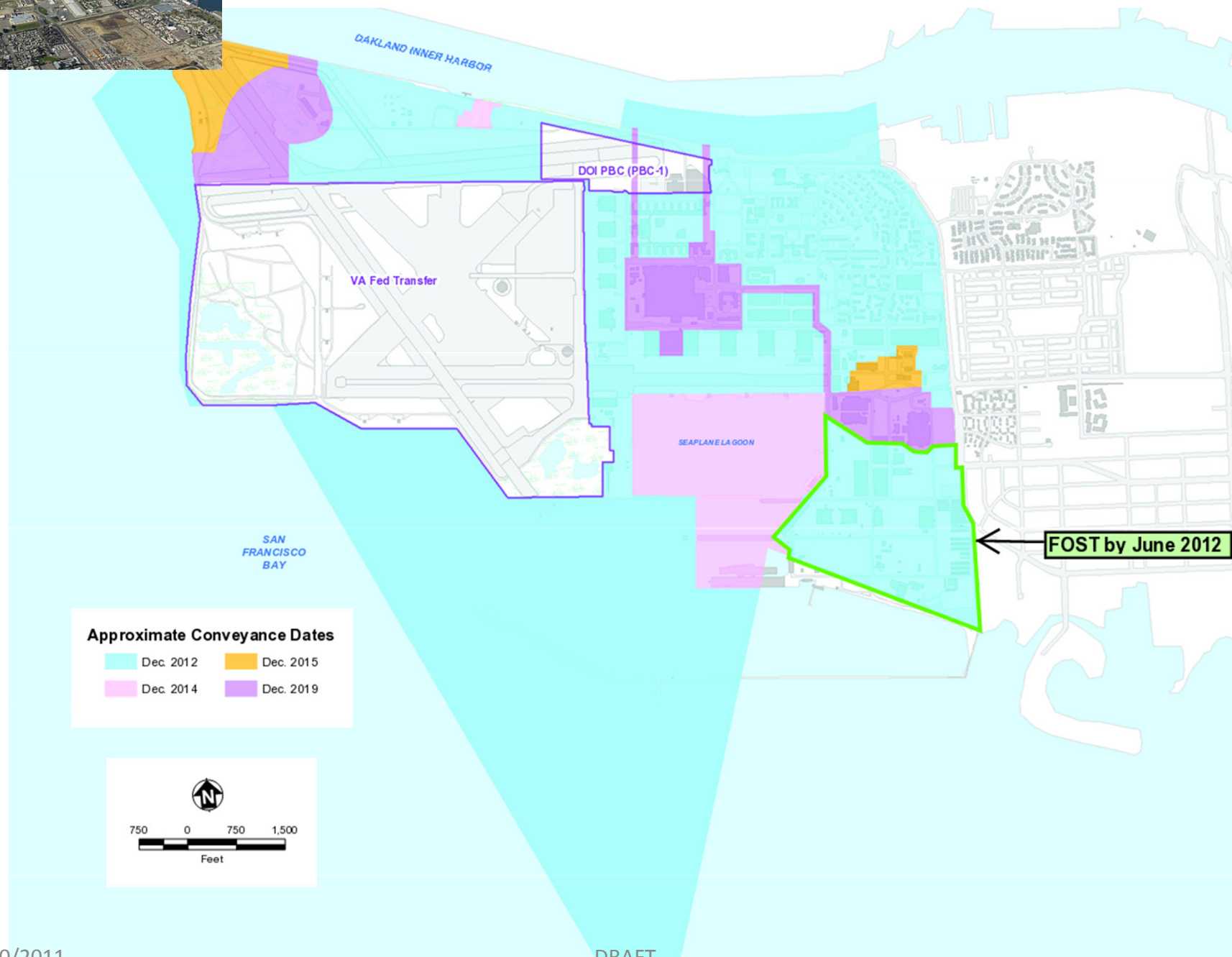
Approximately **20%** of the area is **under investigation** or determination of how best to clean up

Approximately **55%** of the area is **undergoing active cleanup**

Approximately **25%** of the area is **ready to transfer**



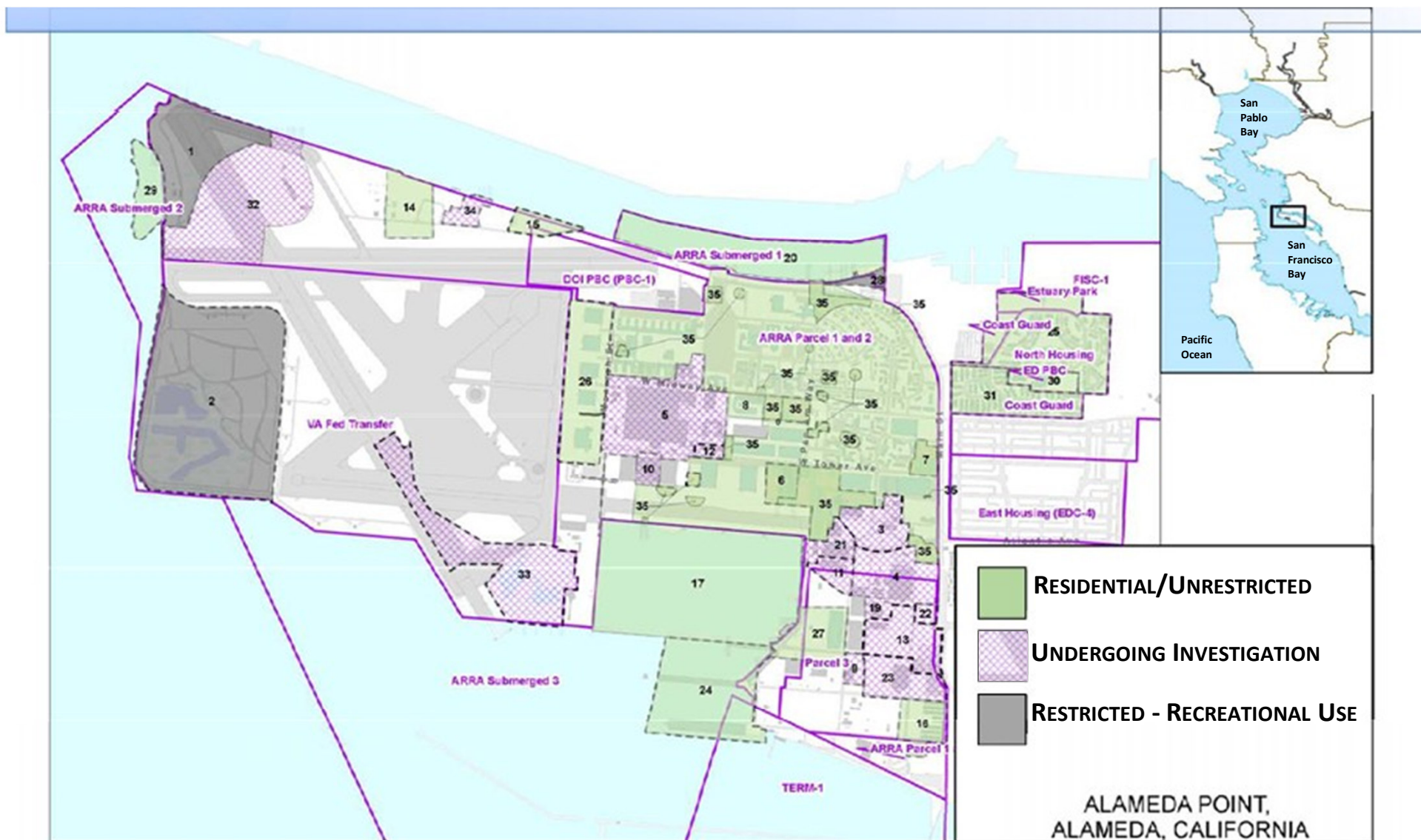
# STATUS of CLEANUP & PROPERTY TRANSFER







# REUSE LEVELS ACHIEVED by CLEANUP





## **SPECIAL TOPICS**

### Groundwater Clean-up Standards

Issue: Should all groundwater be cleaned to drinking-water standards?

- Plans for redevelopment do not contemplate use of groundwater as a source of drinking water.
- Potable water to be supplied by EBMUD.
- Low levels of most contaminant decay through natural processes, regardless of whether its progress is monitored.
- It is not cost-effective to conduct long-term monitoring while drinking-water standards are reached naturally.
- Monitoring for vapor intrusion into buildings, instead, is more useful.





## SPECIAL TOPICS



Approximate  
area where  
shallow  
groundwater  
is not a  
drinking  
water supply



## **SPECIAL TOPICS**

### Commercial Reuse Standards

Issue: Should clean-up standards for commercial mixed-use areas be modified?

- In commercial mixed use areas, ground-floor uses will be limited to commercial uses.
- Residential clean-up standards will be achieved through natural processes anyway.
- Long-term protections for commercial and upper-floor residential uses are more appropriate.
- It is not cost effective to provide long-term monitoring for ground-floor residential uses in areas that have always been planned for commercial mixed-use.





## SPECIAL TOPICS

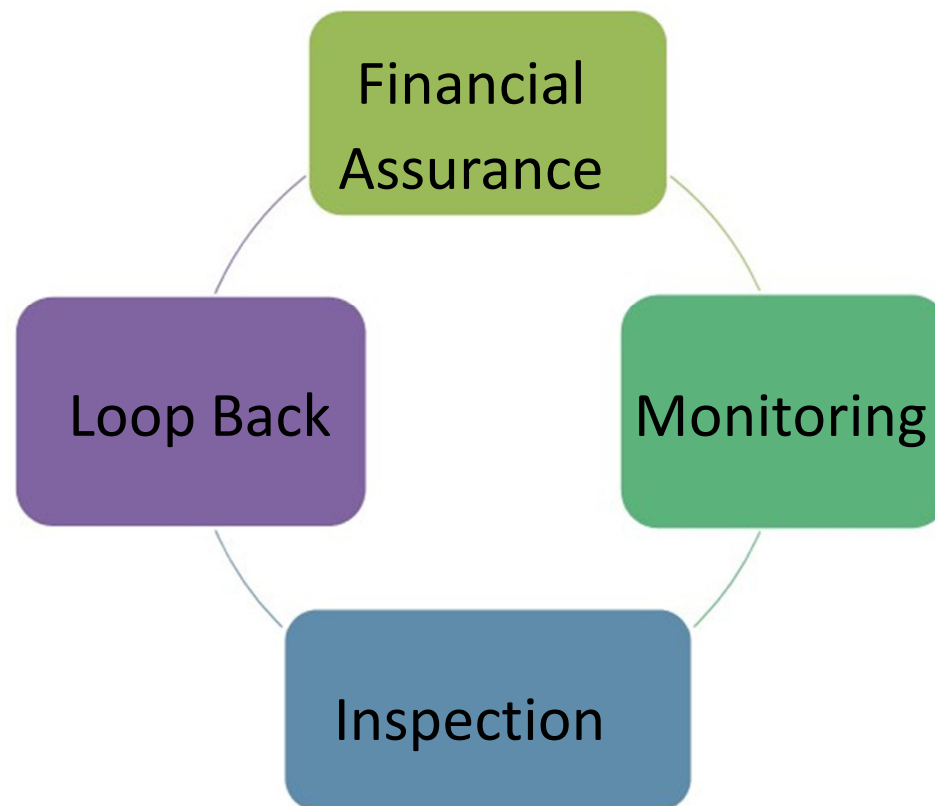


Approximate  
area of no  
ground-floor  
residential



# LAND-USE COVENANTS

## DTSC's Land-Use Covenant Program





## LONG-TERM STEWARDSHIP

- DTSC contracts with "Terradex"
- Intrusive activities trigger e-mail alerts
- DTSC responds through e-mail or by phone call







## LONG-TERM STEWARDSHIP

BCT conducts 5-Year Review if residual contamination remains:

- Is the remedy functioning as intended?
- Are the exposure assumptions, toxicity data, clean-up levels, and remedial action objectives still valid?
- Does any other information question the protectiveness of the remedy?

DTSC - stewards forever



## MORE INFORMATION

### Join the RAB. RAB Members...

- Review/evaluate/comment on environmental documents
- Represent their community and communicate interests and concerns to the Navy and the environmental regulatory agencies

### Navy Website for Alameda Point

[http://www.bracpmo.navy.mil/basepage.aspx?baseid=42&state=California&name=nas\\_alameda](http://www.bracpmo.navy.mil/basepage.aspx?baseid=42&state=California&name=nas_alameda)

### Information Repositories

- Alameda Point - 950 West Mall Square (Building 1), Room 240
- Alameda Public Library - 2200A Central Avenue

### Navy Contact:

Derek J Robinson - BEC for NAS Alameda

619-532-0951

derek.j.robinson1@navy.mil